



Mitsubishi Programmable Controller

MELSEC iQ-R
series

MELSEC iQ-R CC-Link System Master/Local
Module Function Block Reference

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1 Module FBs

This chapter lists the FBs of the CC-Link system master/local modules.

Name	Description
M+RJ61BT11_DeviceRead	Reads the specified number of points of data from the buffer memory or programmable controller device of another station.
M+RJ61BT11_DeviceWrite	Writes the specified number of points of data to the buffer memory or programmable controller device of another station.
M+RJ61BT11_Recv	Automatically performs handshake with another station and reads the specified number of points of data from the buffer memory of the station.
M+RJ61BT11_Send	Automatically performs handshake with another station and writes the specified number of points of data to the buffer memory of the station.
M+RJ61BT11_AutomaticUpdateBufferRead	Reads the specified number of points of data from the automatic update buffer of another station.
M+RJ61BT11_AutomaticUpdateBufferWrite	Writes the specified number of points of data to the automatic update buffer of another station.
M+RJ61BT11_SetParameter	Sets the network parameters in the master station.

Precautions

- The module FBs of the CC-Link system master/local modules do not include error recovery processing. Please create error recovery processing separately according to the system and required operations.
- If message "If the program is compiled, the number of device points in the auto device setting is too small." appears, adjust the automatic device setting.
- If upgrading module FB versions updates instructions, adds a new instruction, or adds a new device, please consult your local Mitsubishi representative.

2 CC-Link System Master/Local Module

2.1 M+RJ61BT11_DeviceRead

Name

M+RJ61BT11_DeviceRead

FB details

Item	Description						
Overview	Reads the specified number of points of data from the buffer memory or programmable controller device of another station.						
Symbol	<div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 20px;"> <p>Execution command — B: i_bEN</p> <p>Module label — DUT: i_stModule</p> <p>Station number — UW: i_uStationNumber</p> <p>Access/attribute code — UW: i_uAccessCode</p> <p>Buffer memory address or device number — UW: i_uTargetAddress</p> <p>Number of read points — UW: i_uReadDataLength</p> </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>M+RJ61BT11_DeviceRead</p> </div> <div style="margin-left: 20px;"> <p>o_bENO: B — Execution status</p> <p>o_bOK: B — Normal completion</p> <p>o_bErr: B — Error completion</p> <p>o_uErrId: UW — Error code</p> <p>o_uReadData: UW — Read data storage device</p> </div> </div>						
Target model	<table border="1" style="width: 100%;"> <tr> <td>Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>Target CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	Target CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
Target CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	49 steps						
Processing	When i_bEN (execution command) is turned on, the function reads the specified number of points of data from the buffer memory or programmable controller device of another station.						
FB compilation method	Macro type						
FB operation	Pulse type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>[For normal end]</p> </div> <div style="width: 45%;"> <p>[For error completion] (same as when a module error occurs)</p> </div> </div>						

Item	Description
Precautions	<ul style="list-style-type: none"> This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. This FB uses the GP.RIRD instruction. Turn off i_bEN (execution command) after o_bOK (normal completion) or o_bErr (error completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) or o_bErr (error completion) is turned off and o_uErrId (error code) is cleared to 0.

Error code

Error code	Description	Action
4000H to 4FFFH	An error occurred in a CPU module.	MELSEC iQ-R CPU Module User's Manual (Application)
B000H to BFFFH	An error occurred in a CC-Link System Master/Local Module.	MELSEC iQ-R CC-Link System Master/Local Module User's Manual (Application)

Labels

Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Station number	i_uStationNumber	Word [Unsigned] /Bit String [16-bit]	0 to 64	Specify the target station number. 0 to 64: Target station number
Access code Attribute code	i_uAccessCode	Word [Unsigned] /Bit String [16-bit]	—	Specify the read buffer memory type or device type. MELSEC iQ-R Programming Manual (Instructions, Standard Functions/ Function Blocks)
Buffer memory address or device number	i_uTargetAddress	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the read buffer memory or the start number of the read device.
Number of read points	i_uReadDataLength	Word [Unsigned] /Bit String [16-bit]	1 to 480	Specify the number of read points in word.

Output arguments

Name	Variable name	Data type	Default value	Description
Execution status	o_bENO	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	The module FB has been processed normally when this argument is on.
Normal completion	o_bErr	Bit	Off	The module FB has been processed abnormally when this argument is on.
Error code	o_uErrId	Word [Unsigned] /Bit String [16-bit]	0	An error code is stored at error completion.
Read data storage device	o_uReadData	Word [Unsigned] /Bit String [16-bit]	0	The read data is stored.

Operation parameters

No operation parameter is applicable to M+RJ61BT11_DeviceRead.

2.2 M+RJ61BT11_DeviceWrite

Name

M+RJ61BT11_DeviceWrite

FB details

Item	Description						
Overview	Writes the specified number of points of data to the buffer memory or programmable controller device of another station.						
Symbol	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>Execution command — B: i_bEN</p> <p>Module label — DUT: i_stModule</p> <p>Station number — UW: i_uStationNumber</p> <p>Access/attribute code — UW: i_uAccessCode</p> <p>Buffer memory address or device number — UW: i_uTargetAddress</p> <p>Number of write points — UW: i_uWriteDataLength</p> <p>Write data storage device — UW: i_uWriteData</p> </div> <div style="border: 1px solid black; padding: 10px; text-align: center; width: 150px;"> <p>M+RJ61BT11_DeviceWrite</p> </div> <div style="flex: 1;"> <p>o_bENO: B — Execution status</p> <p>o_bOK: B — Normal completion</p> <p>o_bErr: B — Error completion</p> <p>o_uErrId: UW — Error code</p> </div> </div>						
Target model	<table border="1" style="width: 100%;"> <tr> <td>Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>Target CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	Target CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
Target CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	49 steps						
Processing	When i_bEN (execution command) is turned on, this function writes the specified number of points of data to the buffer memory or programmable controller device of another station.						
FB compilation method	Macro type						
FB operation	Pulse execution type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>[For normal end]</p> </div> <div style="width: 45%;"> <p>[For error completion] (same as when a module error occurs)</p> </div> </div>						
Precautions	<ul style="list-style-type: none"> This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. This FB uses the GP.RIWT instruction. Turn off i_bEN (execution command) after o_bOK (normal completion) or o_bErr (error completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) or o_bErr (error completion) is turned off and o_uErrId (error code) is cleared to 0. 						

Error code

Error code	Description	Action
4000H to 4FFFH	An error occurred in a CPU module.	MELSEC iQ-R CPU Module User's Manual (Application)
B000H to BFFFH	An error occurred in a CC-Link System Master/Local Module.	MELSEC iQ-R CC-Link System Master/Local Module User's Manual (Application)

Labels

Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Station number	i_uStationNumber	Word [Unsigned] /Bit String [16-bit]	0 to 64	Specify the target station number. 0 to 64: Target station number
Access code Attribute code	i_uAccessCode	Word [Unsigned] /Bit String [16-bit]	—	Specify the write buffer memory type or device type. MELSEC iQ-R Programming Manual (Instructions, Standard Functions/ Function Blocks)
Buffer memory address or device number	i_uTargetAddress	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the write buffer memory or the start number of the write device.
Number of write points	i_uWriteDataLength	Word [Unsigned] /Bit String [16-bit]	1 to 480	Specify the number of write points in word.
Write data Storage device	i_uWriteData	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the device containing the write data.

Output arguments

Name	Variable name	Data type	Default value	Description
Execution status	i_bEN	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	The module FB has been processed normally when this argument is on.
Error completion	o_bErr	Bit	Off	The module FB has been processed abnormally when this argument is on.
Error code	o_uErrId	Word	0	An error code is stored at error completion.

Operation parameters

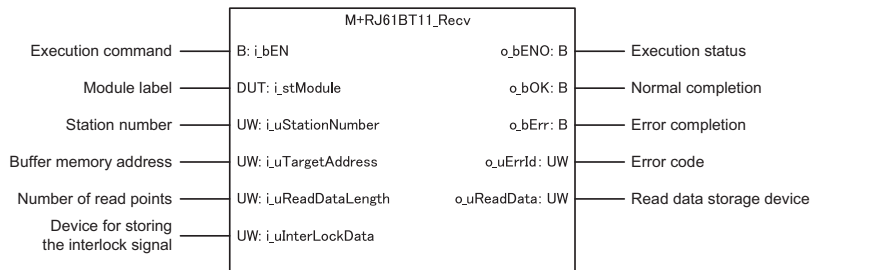
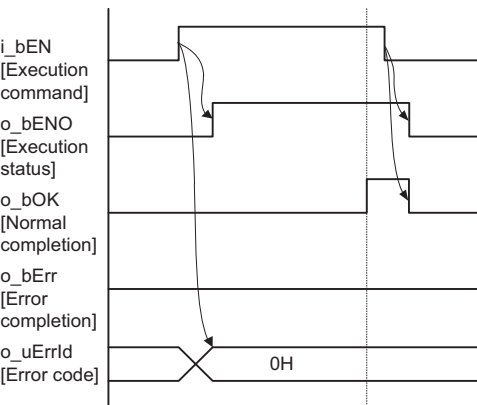
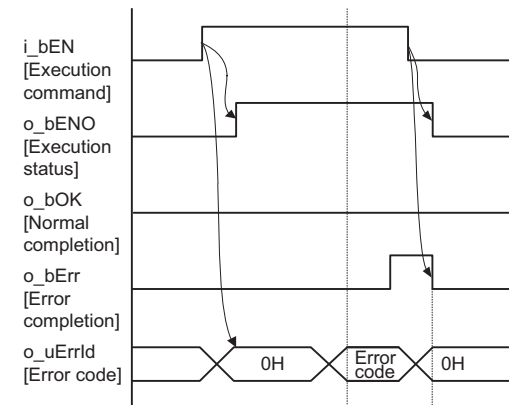
No operation parameter is applicable to M+RJ61BT11_DeviceWrite.

2.3 M+RJ61BT11_Recv

Name

M+RJ61BT11_Recv

FB details

Item	Description						
Overview	Automatically performs handshake with another station and reads the specified number of points of data from the buffer memory of the station. This function is available for modules, such as AJ65BT-R2(N), which have interlock signals for handshake.						
Symbol							
Target model	<table border="1"> <tr> <td>Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	51 steps						
Processing	When i_bEN (execution command) is turned on, this function performs handshake with another station and reads the specified number of points of data from the buffer memory of the station.						
FB compilation method	Macro type						
FB operation	Pulse execution type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>[For normal end]</p>  </div> <div style="width: 45%;"> <p>[For error completion] (same as when a module error occurs)</p>  </div> </div>						
Precautions	<ul style="list-style-type: none"> This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. This FB uses the GP.RIRCV instruction. Turn off i_bEN (execution command) after o_bOK (normal completion) or o_bErr (error completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) or o_bErr (error completion) is turned off and o_uErrId (error code) is cleared to 0. 						

Error code

Error code	Description	Action
4000H to 4FFFH	An error occurred in a CPU module.	☞ MELSEC iQ-R CPU Module User's Manual (Application)
B000H to BFFFH	An error occurred in a CC-Link System Master/Local Module.	☞ MELSEC iQ-R CC-Link System Master/Local Module User's Manual (Application)

Labels

Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Station number	i_uStationNumber	Word [Unsigned] /Bit String [16-bit]	1 to 64	Specify the target station number. 1 to 64: Target station number
Buffer memory address	i_uTargetAddress	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the read buffer memory.
Number of read points	uReadDataLength	Word [Unsigned] /Bit String [16-bit]	1 to 480	Specify the number of read points in word.
Interlock signal Storage device	i_uInterLockData	Word [Unsigned] /Bit String [16-bit] (0..2)	—	Specify the start address of the device containing the interlock signal. When the start address is specified using the label, use "ARRAY" for the data type.

Output arguments

Name	Variable name	Data type	Default value	Description
Execution status	o_bENO	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	The module FB has been processed normally when this argument is on.
Error completion	o_bErr	Bit	Off	The module FB has been processed abnormally when this argument is on.
Error code	o_uErrId	Word [Unsigned] /Bit String [16-bit]	0	An error code is stored at error completion.
Read data storage device	o_uReadData	Word [Unsigned] /Bit String [16-bit]	0	The read data is stored.

Operation parameters

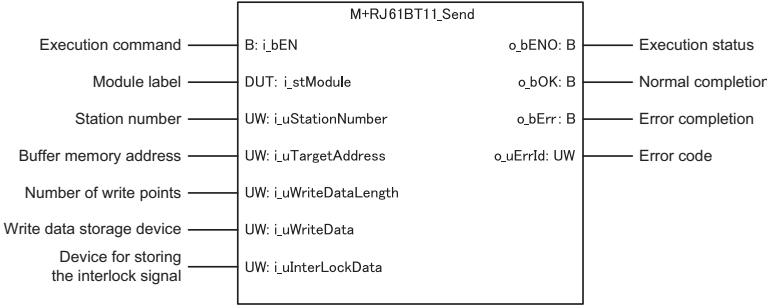
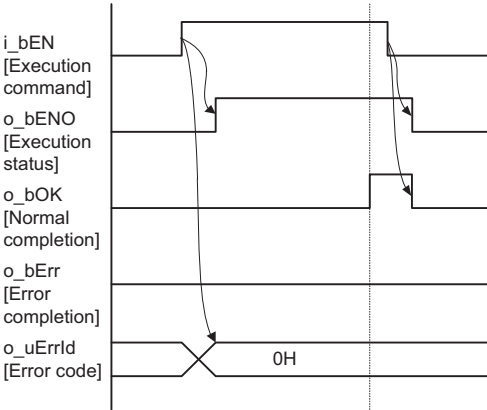
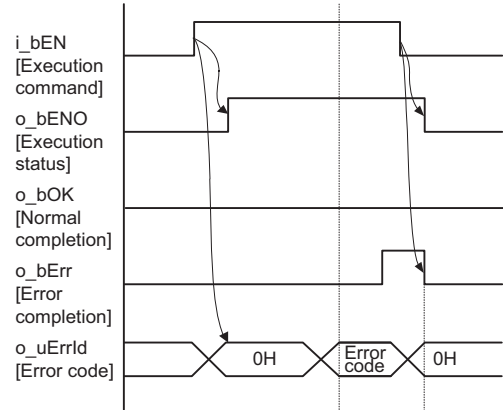
No operation parameter is applicable to M+RJ61BT11_Recv.

2.4 M+RJ61BT11_Send

Name

M+RJ61BT11_Send

FB details

Item	Description						
Overview	Automatically performs handshake with another station and writes the specified number of points of data to the buffer memory of the station. This function is available for modules, such as AJ65BT-R2(N), which have interlock signals for handshake.						
Symbol							
Target model	<table border="1"> <tr> <td>Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>Target CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	Target CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
Target CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	51 steps						
Processing	When i_bEN (execution command) is turned on, this function performs handshake with another station and writes the specified number of points of data to the buffer memory of the station.						
FB compilation method	Macro type						
FB operation	Pulse execution type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>[For normal end]</p>  </div> <div style="width: 45%;"> <p>[For error completion] (same as when a module error occurs)</p>  </div> </div>						
Precautions	<ul style="list-style-type: none"> This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. This FB uses the GP.RISEND instruction. Turn off i_bEN (execution command) after o_bOK (normal completion) or o_bErr (error completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) or o_bErr (error completion) is turned off and o_uErrId (error code) is cleared to 0. 						

Error code

Error code	Description	Action
4000H to 4FFFH	An error occurred in a CPU module.	☞ MELSEC iQ-R CPU Module User's Manual (Application)
B000H to BFFFH	An error occurred in a CC-Link System Master/Local Module.	☞ MELSEC iQ-R CC-Link System Master/Local Module User's Manual (Application)

Labels

Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Station number	i_uStationNumber	Word [Unsigned] /Bit String [16-bit]	1 to 64	Specify the target station number. 1 to 64: Target station number
Buffer memory address	i_uTargetAddress	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the write buffer memory.
Number of write points	i_uWriteDataLength	Word [Unsigned] /Bit String [16-bit]	1 to 480	Specify the number of write points in word.
Write data Storage device	i_uWriteData	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the device containing the write data.
Interlock signal Storage device	i_uInterLockData	Word [Unsigned] /Bit String [16-bit] (0..2)	—	Specify the start address of the device containing the interlock signal. When the start address is specified using the label, use "ARRAY" for the data type.

Output arguments

Name	Variable name	Data type	Default value	Description
Execution status	o_bENO	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	The module FB has been processed normally when this argument is on.
Error completion	o_bErr	Bit	Off	The module FB has been processed abnormally when this argument is on.
Error code	o_uErrId	Word [Unsigned] /Bit String [16-bit]	0	An error code is stored at error completion.

Operation parameters

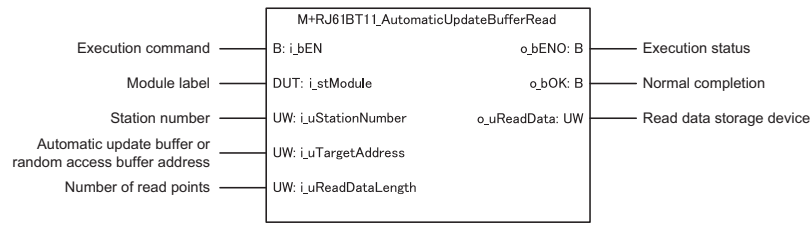
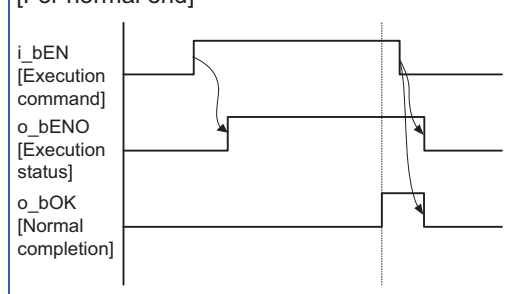
No operation parameter is applicable to M+RJ61BT11_Send.

2.5 M+RJ61BT11_AutomaticUpdateBufferRead

Name

M+RJ61BT11_AutomaticUpdateBufferRead

FB details

Item	Description						
Overview	Reads the specified number of points of data from the automatic update buffer of another station. This function available for modules, such as AJ65BT-R2(N), which have an automatic update buffer.						
Symbol							
Target model	<table border="1"> <tr> <td>Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>Target CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	Target CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
Target CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	23 steps						
Processing	When i_bEN (execution command) is turned on, this function reads the specified number of points of data from the automatic update buffer of another station.						
FB compilation method	Macro type						
FB operation	Pulse execution type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<p>[For normal end]</p> 						
Precautions	<ul style="list-style-type: none"> • This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. • This FB uses the GP.RIFR instruction. • Turn off i_bEN (execution command) after o_bOK (normal completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) is turned off. 						

Labels

■Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Target station number/ random access buffer specification	i_uStationNumber	Word [Unsigned] /Bit String [16-bit]	0 to 64, FFH	Specify the target station number. 1 to 64: Target station number FFH: Random access buffer specification
Automatic update buffer or random access buffer address	i_uTargetAddress	Word [Unsigned] /Bit String [16-bit]	—	Specify the offset value from the start of the automatic update buffer assigned to the target station or random access buffer.
Number of read points	uReadDataLength	Word [Unsigned] /Bit String [16-bit]	1 to 4096	Specify the number of read points.

■Basic labels

Name	Variable name	Data type	Default value	Description
Execution status	o_bENO	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	The module FB has been processed normally when this argument is on.
Read data storage device	o_uReadData	Word [Unsigned] /Bit String [16-bit]	0	The read data is stored.

Operation parameters

No operation parameter is applicable to M+RJ61BT11_AutomaticUpdateFBufferRead.

2.6 M+RJ61BT11_AutomaticUpdateBufferWrite

Name

M+RJ61BT11_AutomaticUpdateBufferWrite

FB details

Item	Description						
Overview	Writes the specified number of points of data to the automatic update buffer of another station. This function available for modules, such as AJ65BT-R2(N), which have an automatic update buffer.						
Symbol							
Target model	<table border="1"> <tr> <td>Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>Target CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	Target CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
Target CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	23 steps						
Processing	When i_bEN (execution command) is turned on, this function writes the specified number of points of data to the automatic update buffer of another station.						
FB compilation method	Macro type						
FB operation	Pulse type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<p>[For normal end]</p>						
Precautions	<ul style="list-style-type: none"> This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. This FB uses the GP.RITO instruction. Turn off i_bEN (execution command) after o_bOK (normal completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) is turned off. 						

Labels

Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Target station number/ random access buffer specification	i_uStationNumber	Word [Unsigned] /Bit String [16-bit]	1 to 64, FFH	Specify the target station number. 1 to 64: Target station number FFH: Random access buffer specification
Automatic update buffer or random access buffer address	i_uTargetAddress	Word [Unsigned] /Bit String [16-bit]	—	Specify the offset value from the start of the automatic update buffer assigned to the target station or random access buffer.
Number of write points	i_uWriteDataLength	Word [Unsigned] /Bit String [16-bit]	1 to 4096	Specify the number of write points.
Write data Storage device	i_uWriteData	Word [Unsigned] /Bit String [16-bit]	—	Specify the start address of the device containing the write data.

Output arguments

Name	Variable name	Data type	Default value	Description
Execution status	o_bENO	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	The module FB has been processed normally when this argument is on.

Operation parameters

No operation parameter is applicable to M+RJ61BT11_AutomaticUpdateFBufferWrite.

2.7 M+RJ61BT11_SetParameter

Name

M+RJ61BT11_SetParameter

FB details

Item	Description						
Overview	Sets the network parameters in the master station.						
Symbol	<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"> <p style="text-align: center; margin: 0;">M+RJ61BT11_SetParameter</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; vertical-align: top;"> <p>Execution command — B: i_bEN</p> <p>Module label — DUT: i_stModule</p> <p>Setting flag — UW: i_uSettingFlag</p> <p>Total number of connected modules/stations — UW: i_uTotalConnectedNumber</p> <p>Slave station setting data — UW: i_uSlaveStationSettingData</p> </td> <td style="width: 40%; text-align: center; vertical-align: top;"> <p>pb_uRetryCount</p> <p>pb_uAutomaticReconnectionStationCount</p> <p>pb_uPlcDownSelect</p> <p>pb_uScanModeSetting</p> <p>pb_uReservedStationSpecificationData</p> <p>pb_uErrorInvalidStationSpecificationData</p> <p>pb_uAutomaticRefreshBufferSize</p> </td> <td style="width: 30%; vertical-align: top;"> <p>o_bENO: B — Execution status</p> <p>o_bOK: B — Normal completion</p> <p>o_bErr: B — Error completion</p> <p>o_uErrId: UW — Error code</p> </td> </tr> </table> </div>	<p>Execution command — B: i_bEN</p> <p>Module label — DUT: i_stModule</p> <p>Setting flag — UW: i_uSettingFlag</p> <p>Total number of connected modules/stations — UW: i_uTotalConnectedNumber</p> <p>Slave station setting data — UW: i_uSlaveStationSettingData</p>	<p>pb_uRetryCount</p> <p>pb_uAutomaticReconnectionStationCount</p> <p>pb_uPlcDownSelect</p> <p>pb_uScanModeSetting</p> <p>pb_uReservedStationSpecificationData</p> <p>pb_uErrorInvalidStationSpecificationData</p> <p>pb_uAutomaticRefreshBufferSize</p>	<p>o_bENO: B — Execution status</p> <p>o_bOK: B — Normal completion</p> <p>o_bErr: B — Error completion</p> <p>o_uErrId: UW — Error code</p>			
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Target model	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Target module</td> <td>RJ61BT11</td> </tr> <tr> <td>Target CPU module</td> <td>RCPU</td> </tr> <tr> <td>Engineering tool</td> <td>GX Works3</td> </tr> </table>	Target module	RJ61BT11	Target CPU module	RCPU	Engineering tool	GX Works3
Target module	RJ61BT11						
Target CPU module	RCPU						
Engineering tool	GX Works3						
Language	Ladder diagram						
Number of basic steps	112 steps						
Processing	When i_bEN (execution command) is turned on, this function, this function sets the network parameters in the master station.						
FB compilation method	Macro type						
FB operation	Pulse type (multiple-scan execution type)						
Input condition for FB_EN	None						
Timing chart of I/O signals	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>[For normal end]</p> </div> <div style="width: 45%;"> <p>[For error completion] (same as when a module error occurs)</p> </div> </div>						
Precautions	<ul style="list-style-type: none"> This FB does not include error recovery processing. Please create error recovery processing separately according to the system and required operations. This FB uses the GP.RLPASET instruction. Turn off i_bEN (execution command) after o_bOK (normal completion) or o_bErr (error completion) is turned on. By turning off i_bEN (execution command), o_bOK (normal completion) or o_bErr (error completion) is turned off and o_uErrId (error code) is cleared to 0. 						

Error code

Error code	Description	Action
B000H to BFFFH	An error occurred in a CC-Link System Master/Local Module.	☞ MELSEC iQ-R CC-Link System Master/Local Module User's Manual (Application)

Labels

Input arguments

Name	Variable name	Data type	Range	Description
Execution command	i_bEN	Bit	Off, on	On: Start the module FB. Off: Do not start the module FB.
Module label	i_stModule	Structures	—	Specify the module for which the FB is to be executed. Specify the module label of relevant modules. Ex. BT11_1
Setting flag	i_uSettingFlag	Word [Unsigned] /Bit String [16-bit]	—	Specify whether each setting data is valid or invalid. • 0: Invalid (The default value is used.) • 1: Valid
Total number of connected modules/stations	i_uTotalConnectedNumber	Word [Unsigned] /Bit String [16-bit]	1 to 64	Specify the number of slave stations connected.
Slave station setting data	i_uSlaveStationSettingData	Word [Unsigned] /Bit String [16-bit] (0..63)	—	Specify the start number of the device for storing the slave station setting data. (Default value: 0) When the start address is specified using the label, use "ARRAY" for the data type. Set the station type, the number of occupied stations, and the station number as follows. Station type setting: Station number setting: 1 to 64 Number of occupied stations setting • 1 stations: 1 • 2 stations: 2 • 3 stations: 3 • 4 stations: 4 Station type setting • Ver.1-compatible remote I/O station: 0 • Ver.1-compatible remote device station: 1 • Ver.1-compatible intelligent device station: 2 • Ver.2-compatible remote device station (single): 5 • Ver.2-compatible intelligent device station (single): 6 • Ver.2-compatible remote device station (double): 8 • Ver.2-compatible intelligent device station (double): 9 • Ver.2-compatible remote device station (quadruple): 11 • Ver.2-compatible intelligent device station (quadruple): 12 • Ver.2-compatible remote device station (octuple): 14 • Ver.2-compatible intelligent device station (octuple): 15

■Output arguments

Name	Variable name	Data type	Default value	Description
Execution status	o_bENO	Bit	Off	On: In execution Off: Not in execution
Normal completion	o_bOK	Bit	Off	Turned on for one scan at normal completion.
Error completion	o_bErr	Bit	Off	Turned on for one scan at error completion.
Error code	o_uErr_Id	Word	0	An error code is stored at error completion.

Operation parameters

Name	Variable name	Data type	Range	Default value	Description																																																																																					
Number of retries	pb_uRetryCount	Word [Unsigned] /Bit String [16-bit]	1 to 7	3	Set the number of retries to be performed for a communication error station.																																																																																					
Number of automatic return modules	pb_uAutomaticReconnectionStationCount	Word [Unsigned] /Bit String [16-bit]	1 to 10	1	Specify the number of slave stations that can return by one link scan.																																																																																					
Data link setting when CPU is down	pb_uPlcDownSelect	Word [Unsigned] /Bit String [16-bit]	0, 1	0	Specify whether to stop or continue the data link if the CPU module is stopped with an error. <ul style="list-style-type: none"> • 0: Stops the data link. • 1: Continues the data link. 																																																																																					
Scan mode setting	pb_uScanModeSetting	Word [Unsigned] /Bit String [16-bit]	0, 1	0	Set the link scan mode. <ul style="list-style-type: none"> • 0: Link scan is performed asynchronously with a sequence scan. • 1: Link scan is performed synchronously with a sequence scan. 																																																																																					
Reserved station specification data	pb_uReservedStationSpecificationData	Word [Unsigned] /Bit String [16-bit] (0..3)	0000H to FFFFH	0	Specify the reserved station. <ul style="list-style-type: none"> • 0: Not specified • 1: Specified <table border="1" style="margin-left: 40px;"> <tr> <td></td> <td>bF</td><td>bE</td><td>bD</td><td>bC</td><td>bB</td><td>bA</td><td>b9</td><td>b8</td><td>b7</td><td>b6</td><td>b5</td><td>b4</td><td>b3</td><td>b2</td><td>b1</td><td>b0</td> </tr> <tr> <td>1st word</td> <td>16</td><td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td> </tr> <tr> <td>2nd word</td> <td>32</td><td>31</td><td>30</td><td>29</td><td>28</td><td>27</td><td>26</td><td>25</td><td>24</td><td>23</td><td>22</td><td>21</td><td>20</td><td>19</td><td>18</td><td>17</td> </tr> <tr> <td>3rd word</td> <td>48</td><td>47</td><td>46</td><td>45</td><td>44</td><td>43</td><td>42</td><td>41</td><td>40</td><td>39</td><td>38</td><td>37</td><td>36</td><td>35</td><td>34</td><td>33</td> </tr> <tr> <td>4th word</td> <td>64</td><td>63</td><td>62</td><td>61</td><td>60</td><td>59</td><td>58</td><td>57</td><td>56</td><td>55</td><td>54</td><td>53</td><td>52</td><td>51</td><td>50</td><td>49</td> </tr> </table> <p style="margin-left: 40px;">1 to 64 in the table indicate station numbers.</p> <p>For a slave station which occupies two or more stations, specify only the start number.</p>		bF	bE	bD	bC	bB	bA	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0	1st word	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	2nd word	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	3rd word	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	4th word	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49
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Error invalid station specification data	pb_uErrorInvalidStationSpecificationData	Word [Unsigned] /Bit String [16-bit] (0..3)	0000H to FFFFH	0	Specify the error invalid station. <ul style="list-style-type: none"> • 0: Not specified • 1: Specified <table border="1" style="margin-left: 40px;"> <tr> <td></td> <td>bF</td><td>bE</td><td>bD</td><td>bC</td><td>bB</td><td>bA</td><td>b9</td><td>b8</td><td>b7</td><td>b6</td><td>b5</td><td>b4</td><td>b3</td><td>b2</td><td>b1</td><td>b0</td> </tr> <tr> <td>1st word</td> <td>16</td><td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td> </tr> <tr> <td>2nd word</td> <td>32</td><td>31</td><td>30</td><td>29</td><td>28</td><td>27</td><td>26</td><td>25</td><td>24</td><td>23</td><td>22</td><td>21</td><td>20</td><td>19</td><td>18</td><td>17</td> </tr> <tr> <td>3rd word</td> <td>48</td><td>47</td><td>46</td><td>45</td><td>44</td><td>43</td><td>42</td><td>41</td><td>40</td><td>39</td><td>38</td><td>37</td><td>36</td><td>35</td><td>34</td><td>33</td> </tr> <tr> <td>4th word</td> <td>64</td><td>63</td><td>62</td><td>61</td><td>60</td><td>59</td><td>58</td><td>57</td><td>56</td><td>55</td><td>54</td><td>53</td><td>52</td><td>51</td><td>50</td><td>49</td> </tr> </table> <p style="margin-left: 40px;">1 to 64 in the table indicate station numbers.</p> <p>For a slave station which occupies two or more stations, specify only the start number.</p> <p>If both the reserved and error invalid stations are specified for the same station, the reserved station specification will take priority.</p>		bF	bE	bD	bC	bB	bA	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0	1st word	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	2nd word	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	3rd word	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	4th word	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49
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Automatic update buffer assignment data	pb_uAutomaticRefreshBufferSize	Word [Unsigned] /Bit String [16-bit] (0..25)	0H, 80H to 1000H	80H	Specifies the assigned buffer memory size (words) that is used for the transient transmission with the automatic update buffer that is performed to the local or intelligent device station. <ul style="list-style-type: none"> • 0: Not specified • 1: Specified <p>For the slave stations that have been set as intelligent device stations in the slave station setting data, set them in ascending order of station numbers.</p> <table border="1" style="margin-left: 40px;"> <tr> <td>1st word</td> <td>Automatic update buffer size (1st)</td> </tr> <tr> <td>2nd word</td> <td>Automatic update buffer size (2nd)</td> </tr> <tr> <td>3rd word</td> <td>Automatic update buffer size (3rd)</td> </tr> <tr> <td></td> <td style="text-align: center;">⋮</td> </tr> <tr> <td>24th word</td> <td>Automatic update buffer size (24th)</td> </tr> <tr> <td>25th word</td> <td>Automatic update buffer size (25th)</td> </tr> <tr> <td>26th word</td> <td>Automatic update buffer size (26th)</td> </tr> </table> <p>Assuming that the total size of the automatic update buffer is within 1000H (4096) words, specify the required size for each intelligent device station.</p>	1st word	Automatic update buffer size (1st)	2nd word	Automatic update buffer size (2nd)	3rd word	Automatic update buffer size (3rd)		⋮	24th word	Automatic update buffer size (24th)	25th word	Automatic update buffer size (25th)	26th word	Automatic update buffer size (26th)																																																																							
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INSTRUCTION INDEX

M

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MEMO



REVISIONS

*The manual number is given on the bottom left of the back cover.

Revision date	*Manual number	Description
June 2014	BCN-P5999-0380-A	First edition
July 2014	BCN-P5999-0380-B	Partial correction

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